

REMARKS

The Office Action dated October 10, 2006 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1-8, 13-20, and 22-26 are amended to more particularly point out and distinctly claims the subject matter of the present invention. New claims 27 and 28 are added. No new matter is added. Claims 1-28 are respectfully submitted for consideration.

The Office Action rejected claim 13 under 35 U.S.C. 112, second paragraph for being indefinite. Applicants submit that claim 13 is amended to provide proper antecedent basis for all of the recited claim features. Accordingly, withdrawal of the rejection under 35 U.S.C. 112, second paragraph is respectfully requested.

The Office Action rejected claims 17 and 24 under 35 U.S.C. 101, for being directed to non-statutory subject matter. Applicants submit that claims 17 and 24 are amended to more clearly be directed to a system and an apparatus which are statutory subject matter. Accordingly, withdrawal of the rejection under 35 U.S.C. 101 is respectfully requested.

The Office Action rejected claims 1, 2, 4, 5, 11, 17 and 20 under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,792,474 to Hopprich et al. (Hopprich). Applicants respectfully submit that Hopprich fails to disclose or suggest all of the features recited in any of the pending claims.

Claim 1, from which claims 2-13 depend, is directed to a method for proving ownership of an address of a first node in an IP based communication system. A private key and public key pair are provided at a first node. An address is generated by the first node, using the public key of the first node. The address is provided to a second node. An address verification request is received from a second node at the first node. The first node proving to the second node that the first node owns the address by providing an address verification answer generated using the private key corresponding to the public key.

Claim 17, from which claims 18-23 depend, is directed to a node for proving ownership of an address of a first node in an IP based communication system. A providing unit is configured to provide a private key and a public key pair. An address generating unit is configured to generate the address using the public key of the node. An answer generating unit is configured to prove ownership of the address by providing an address verification answer to at least one address verification request sent by a second node, the answer being generated using the private key corresponding to the public key.

Applicants respectfully submit that each of the above claims recites features that are neither disclosed nor suggested in Hopprich.

Hopprich is directed to a technique of providing security via a verification and authentication technique that allows two components to securely verify the identity of each other via key encryption techniques during an exchange of information (abstract). Column 21, line 61, to column 22, line 24, of Hopprich, describes the use of the

customary two cryptographic keys: a public key and a private key. According to column 22, line 25 following related to Fig. 3, a guest computer system may send a request for an assignment of an address to an address server. As mentioned at column 22, lines 41 to 56, of Hopprich, the guest computer system 110 sends the request for an assignment of an address encrypted in part with the address server's public key. Only the address server's private key can decrypt the encrypted part of the request for an assignment. Using similar key encryption techniques, the address server 120 can authenticate and verify the identity of the requesting computer system, as mentioned in column 22, lines 57 to 67.

Applicants respectfully submit that Hopprich fails to disclose or suggest at least the feature of generating, by the first node, an address using the public key of the first node, as recited in claim 1 and similarly recited in claim 17. As mentioned above, Hopprich merely describes the guest computer system 110 sends the request for an assignment of an address encrypted in part with the address server's public key.

Applicants respectfully submit that because claims 2, 4, 5, 11, and 20 depend from claims 1 and 17, these claims are allowable at least for the same reasons as claims 1 and 17, as well as for the additional features recited in these dependent claims.

Based at least on the above, applicants respectfully submit that Hopprich fails to disclose or suggest all of the features recited in claims 1, 2, 4, 5, 11, 17 and 20. Accordingly, withdrawal of the rejection under 35 U.S.C. 102(e) of claims 1, 2, 4, 5, 11, 17 and 20 is respectfully requested.

The Office Action rejected claims 14-16 and 24-26 under 35 U.S.C. 102(e) as being anticipated by US Patent Publication No. 2002/0133607 to Nikander (Nikander). Applicants respectfully submit that Nikander fails to disclose or suggest all of the features of any of the above claims.

Claim 14, from which claims 15 and 16 depend, is directed to a method for proving ownership of an IP address of a node in an IP based communication system. The node generates the IP address based on passwords used only once. Another node receives the IP address, thereby verifying that the node owns the IP address by checking the password.

Claim 24, from which claims 25 and 26 depend, is directed to a system for proving ownership of an IP address of a node in an IP based communication system. A first node, wherein the node comprises generating unit configured to generate the IP address based on passwords used only once. A second node is configured to receive the IP address, wherein the second node includes a verifying unit that is configured to verify that the first node owns the IP address by checking the password.

Applicants respectfully submit that each of the above claims recites features that are neither disclosed nor suggested in Nikander.

Nikander is directed to verifying that a host coupled to an IP network is authorized to use an IP address which the host claims to own, the IP address comprising a routing prefix and an interface identifier part. Nikander describes receiving from the host one or more components, applying a one-way coding function to each component and/or

derivatives of each component, and comparing the result or a derivative of the result against the interface identifier part of the IP address. If the result or its derivative matches the interface identifier the host is assumed to be authorized to use the IP address and if the result or its derivative does not match the interface identifier the host is assumed not to be authorized to use the IP address.

Applicants respectfully submit that Nikander fails to disclose or suggest at least the feature of generating by the node, the IP address based on passwords used only once, as recited in claim 14 and similarly recited in claim 24. As discussed above, Nikander applying a one-way coding function to each component and/or derivatives of each component. However, Nikander is silent with regards to a "one-time password", wherein the number/password is incremented or decremented each time the IP address is transmitted.

Applicants respectfully submit that because claims 15, 16, 25 and 26 depend from claims 14 and 24, these claims are allowable at least for the same reasons as claims 14 and 24, as well as for the additional features recited in these dependent claims.

Based at least on the above, Applicants respectfully submit that Nikander fails to disclose or suggest all of the features recited in claims 14-16 and 24-26. Accordingly, withdrawal of the rejection under 35 U.S.C. 102(e) of claims 14-16 and 24-26 is respectfully requested.

The Office Action rejected claims 3, 6-10, 12, 13, 18, 19, and 21-23 under 35 U.S.C. 103(a) as being obvious over Hopprich, in view of Nikander. The Office Action

took the position that Hopprich disclosed all of the features of these claims except wherein the address in an IPv6 (IP version 6) address. The Office Action asserted that Nikander disclosed this feature. Applicants respectfully submit that the cited references, taken individually or in combination, fail to disclose or suggest all of the features recited in any of the above claims. Specifically, Hopprich is deficient at least for the reasons discussed above regarding claims 1 and 17 and Nikander fails to cure these deficiencies.

Hopprich and Nikander are discussed above. As discussed previously, Hopprich fails to disclose or suggest at least the feature of generating, by the first node, an address using the public key of the first node, as recited in claim 1 and similarly recited in claim 17. Further, Nikander merely describes the claimant first sends a packet containing the address to be verified, including the interface identifier and components from which the interface identifier was generated. Nikander goes on to state that the public key may be later sent as an additional piece of information. See at least paragraph [0161] of Nikander. Thus, Nikander fails to cure the deficiencies of Hopprich.

Based at least on the above, Applicants respectfully submit that the cited references fail to disclose or suggest all of the features recited in claims 3, 6-10, 12, 13, 18, 19, and 21-23. Accordingly, withdrawal of the rejection under 35 U.S.C. 103(a) of claims 3, 6-10, 12, 13, 18, 19, and 21-23 is respectfully requested.

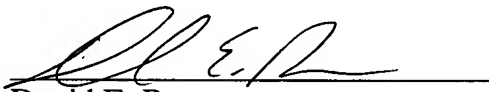
As stated above, new claims 27 and 28 are added. Applicants respectfully submit that claims 27 and 28 recite features that are neither disclosed nor suggested in any of the cited references.

Applicants respectfully submit that each of claims 1-28 recites features that are neither disclosed nor suggested in any of the cited references. Accordingly, it is respectfully requested that each of claims 1-28 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,


David E. Brown
Registration No. 51,091

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Tysons Corner, Virginia 22182-2700
Telephone: 703-720-7800; Fax: 703-720-7802

DEB:jkm
Enclosures: Petition for Extension of Time
Additional Claim Fee Transmittal
Check No. 15856